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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,413	09/24/2001	Keizo Hirose	33082M102	5643

7590 06/09/2005

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EXAMINER

BALSIS, SHAY L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/960,413

Applicant(s)

HIROSE ET AL.

Examiner

Shay L. Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,5,7,14-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,5,7,14-19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/16/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 5, 7, 14-19, 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21-24 all include the limitation that the “members are attached to a body by turns”. Examiner is confused as to what “turns” is? The Examiner has looked to the specification for clarification however, the specification does not clarify the meaning of “turns” but only states that the members are attached to a body by turns. This is not a terminology that is known in the art and therefore, the Applicant is asked to clarify what is meant by attached by turns.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5, 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolton et al. (USPN 6131233) in view of Reynolds (USPN 4066366) and further in view of Allaire et al. (USPN 3827099).

Bolton teaches a mop comprising a plurality of flexible thready members (3). The members each have a hollow channel and are water permeable. Each member has a number of channels extending from the hollow channel since water permeable materials are not solid but have microscopic openings from one side to the other. The cleaning tool is capable of rotating against a substrate. Bolton teaches all the essential elements of the claimed invention, including that the members extend straight and are tied up in a bundle and mounted on a body (2) for holding the member. Bolton however fails to teach that the body has a cleaning liquid passage for supplying cleaning liquid to the members and that the brush members comprise short and long elements.

Reynolds teaches a mop that is attached to a water supply (Reynolds abstract). Allaire et al. teaches a mop comprising short and long strips (Reynolds elements 12, 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bolton to have a water supply as taught by Reynolds so that the mop would have a constant supply of clean water, without stopping the process of cleaning. With Bolton's current invention, when more water is needed the cleaning process would stop and the mop would have to be dunked in a bucket of cleaning water. That bucket of cleaning water would eventually become dirty and then the mop would be using dirty water to clean the substrate. Additionally, it would have been obvious to modify Bolton to have cleaning members that vary in length since this would create denser areas on the mop head, which improves the dust collecting feature (Allaire col. 2, lines 50-61).

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Claims 3, 5, 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farquhar (USPN 1930044) in view of Reynolds (USPN 4066366) and further in view of Allaire et al. (USPN 3827099).

Farquhar teaches a cleaning mitt comprising a plurality of flexible thready members (21). The members each have a hollow channel and are water permeable. Each member has a number of channels extending from the hollow channel since water permeable materials are not solid but have microscopic openings from one side to the other. The cleaning tool is capable of rotating against a substrate. Farquhar teaches all the essential elements of the claimed invention, including that the members extend straight and are tied up in a bundle and mounted on a body (2) for holding the member. Farquhar however fails to teach that the body has a cleaning liquid passage for supplying cleaning liquid to the members and that the brush members comprise short and long elements.

Reynolds teaches a mop that is attached to a water supply (Reynolds abstract). Allaire et al. teaches a mop comprising short and long strips (Reynolds elements 12, 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Farquhar to have a water supply as taught by Reynolds so that the mop would have a constant supply of clean water, without stopping the process of cleaning. With Farquhar's current invention, when more water is needed the cleaning process would stop and the mop would have to be dunked in a bucket of cleaning water. That bucket of cleaning water would eventually become dirty and then the mop would be using dirty water to clean the substrate. Additionally, it would have been obvious to modify Farquhar to have cleaning members that vary in length since

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this would create denser areas on the mop head, which improves the dust collecting feature (Allaire col. 2, lines 50-61).

Claim 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belan (USPN 4958596) in view of Koffler (USPN 4730361).

Belan teaches a cleaning tool comprising members (36) in a bundle. Each member has a hollow channel (39) with a number of channels extending from the hollow channel (49). The members are made of a water-repellent material. The bristles are attached to a body and the body comprises a fluid passage for supplying fluid to the members. Additionally, the members are considered to be flexible. Belan does not clearly state whether the bristles are rigid or not. It is assumed that they are flexible since hairbrush bristles are made to be flexible to as to prevent pulling and tangling of the hair. Belan teaches all the essential elements of the claimed invention however fails to teach that the bristles comprise long and short elements.

Koffler teaches a hairbrush comprising long and short bristles (Koffler element 12, 13, 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Belan so that the bristles vary in length as taught by Koffler so as to minimize tangling or snarling during the hairbrushing operation and to lift and shaft hair to each individual head (Koffler, col. 3, lines 27-36).

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***Allowable Subject Matter***

Claim 14-19, 23 and 24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 23 and 24 both state that the cleaning apparatus comprises a scrub arm for holding the substrate cleaning tool and a holder for holding a substrate to be cleaned by the cleaning tool.

None of the prior art references teach a scrub arm or a holder.

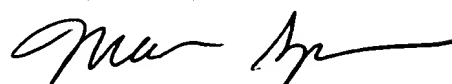
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb  
6/7/05

  
MARK SPISICH  
PRIMARY EXAMINER  
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1700